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PAPER POWDER REMOVING APPARATUS

TECHNICAL FIELD

The present invention relates to a carton paper powder removing apparatus of a paper liquid container packaging and filling machine for removing paper powder in a carton by inserting a paper powder removing nozzle from an upper opening part of a bottomed tubular carton.

RELATED BACKGROUND ART

As shown in a general view of a paper liquid container packaging and filling machine of Fig.3, a liquid packaging quadrangular tubular paper-made container (carton) is supplied to an intermittently rotating mandrel 51, with a flat shaped blanks 1 of a quadrangular tubular carton 1 raised to be formed into a solid shape, as is shown in an appearance perspective view of the blanks of Fig.4. In the mandrel 51, the quadrangular tubular paper-made container is formed in such a manner that each carton is sequentially inserted into and supported by a mandrel which is radially arranged on a rotation support for making a quadrangular tubular paper container; a lower part of a quadrangular tubular body of each carton is folded while the mandrel 51 rotates; and then bottom seal molding is performed by heating. Processing of a bottom-sealed paper-made container 1 follows a course from a sterilization station 52 to a filling station 53, and then to a top sealing station 54 where the paper-made container 1 is molded into a final product (filling carton) 55.

Conventionally, as shown in Fig.5, a paper powder removing nozzle 56 is inserted into an upper opening part of the carton 1 before filling, and while air is blown by using an air jetting port 57 and an air suction port 58 disposed on an tip part of the nozzle, the air is sucked to the outside of the carton, whereby the paper